

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2017-3-E

September 20, 2017

IN RE:)	JOINT PROPOSED ORDER
)	APPROVING AND
Annual Review of Base Rates for Fuel)	ADOPTING ADJUSTMENT
Costs of Duke Energy Carolinas, LLC)	IN FUEL COST RECOVERY
)	FACTORS AND ADOPTING
)	SETTLEMENT AGREEMENT

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I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina (“Commission”) on the annual review of base rates for fuel costs of Duke Energy Carolinas, LLC (“DEC” or the “Company”). The procedure followed by the Commission is set forth in S.C. Code Ann. § 58-27-865 (2015), which provides for annual hearings to allow the Commission and all interested parties to review the prudence of fuel purchasing practices and policies of an electrical utility and for the Commission to determine if any adjustment in a utility’s fuel cost recovery mechanism is necessary and reasonable. Additionally, and pursuant to S.C. Code Ann. § 58-39-140 (2015), the Commission must determine in this proceeding whether an increase or decrease should be granted in the fuel cost component designed to recover certain costs incurred by the Company to implement the Distributed Energy Resource Program (“DERP”) previously approved by the Commission.

A. Notice and Intervention

By letter dated March 10, 2017, the Clerk’s Office of the Commission instructed the Company to publish a Notice of Hearing and Prefile Testimony Deadlines (“Notice”) in newspapers of general circulation and provide Proof of Publication on or before June 16, 2017. The letter also instructed the Company to furnish the Notice to each affected customer and provide a certification to the Commission on or before June 16, 2017, that notification has been furnished. The Notice indicated the nature of the proceeding and advised all interested parties who wished to participate in the scheduled proceeding of the manner and time in which to file appropriate pleadings. On May 10, 2017, the Company filed with the Commission an affidavit indicating that

the Notice had been provided to the Company's retail customers in South Carolina. On May 17, 2017, the Company filed with the Commission affidavits demonstrating that the Notice was duly published in newspapers having general coverage in the Company's service territory.

Petitions to intervene were received from South Carolina Energy Users Committee ("SCEUC"), Adger Solar, LLC ("Adger"), Southern Current, LLC ("Southern"), South Carolina Solar Business Alliance, LLC ("SBA"), the South Carolina Coastal Conservation League ("CCL"), and Southern Alliance for Clean Energy ("SACE"). The South Carolina Office of Regulatory Staff ("ORS") is automatically a party pursuant to S.C. Code Ann. § 58-4-10(B) (2015).

There was no opposition to any of the Petitions to Intervene and the Commission issued Orders granting each Petition to Intervene.¹

II. JURISDICTION OF THE COMMISSION

In accordance with S.C. Code Ann. § 58-27-140 (1) (2015), the Commission may, upon petition, "...ascertain and fix just and reasonable standards, classifications, regulations, practices or service to be furnished, imposed, observed, and followed by any or all electrical utilities." Further, S.C. Code Ann. § 58-27-865(B) (2015) states, in pertinent part, that "[u]pon conducting public hearings in accordance with law, the commission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by the commission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period."

¹ See Order No. 2017-259, granting the Petition to Intervene filed on behalf of SCEUC; See Order No. 2017-369, granting the Petition to Intervene filed on behalf of Southern; See Order No. 2017-308, granting the Petition to Intervene filed on behalf of Adger; See Order No. 2017-370, granting the Petition to Intervene filed on behalf of SBA; and See Order No. 2017-416, granting the Petition to Intervene filed on behalf of SACE and CCL.

Consistent with the requirements of S.C. Code Ann. § 58-27-865(B), the Commission convened an evidentiary hearing on September 12, 2017. In carrying out these duties in relation to a Settlement Agreement, the Commission's published "Settlement Policies and Procedures" (Revised 6/13/2006) are applicable to guide this proceeding. Specifically, Section II of the Settlement Policies and Procedures, titled "Consideration of Settlements," states:

When a settlement is presented to the Commission, the Commission will prescribe procedures appropriate to the nature of the settlement for the Commission's consideration of the settlement... [W]hen the settlement presents issues of significant implication for other utilities, customers or the public interest, the Commission will convene an evidentiary hearing to consider the reasonableness of the settlement and whether acceptance of the settlement is just, fair, and reasonable, in the public interest, or otherwise in accordance with law or regulatory policy. Approval of such settlements shall be based upon substantial evidence in the record.

III. DISCUSSION OF THE HEARING

The public evidentiary hearing in this matter was held on September 12, 2017, before this Commission with the Honorable Swain E. Whitfield presiding as Chairman. Representing the Parties before the Commission in this Docket were Rebecca J. Dulin, Esquire, and Frank R. Ellerbe, III, Esquire, for the Company; Scott Elliott, Esquire for SCEUC; Lauren J. Bowen, Esquire, and J. Blanding Holman, IV, Esquire, for SACE and CCL, Richard L. Whitt, Esquire for Southern and Adger, Timothy F. Rogers, Esquire for SBA and Andrew M. Bateman, Esquire, for ORS. At the outset of the hearing, the ORS counsel presented the Settlement Agreement, which was admitted into the record as Hearing Exhibit 1.

A. The Settlement Agreement

On September 5, 2017, after the due dates for pre-filing direct, rebuttal and surrebuttal testimony by the parties had passed, and after all parties had been afforded a full opportunity to conduct discovery in this matter, ORS filed with the Commission a Settlement Agreement

(“Settlement Agreement”) executed by the Company, SCEUC, and ORS (collectively, referred to as the “Settling Parties” or sometimes individually as a “Settling Party”). In the Settlement Agreement, the Settling Parties represented to the Commission that they discussed the issues presented in this case and determined that each Settling Party’s interests and the public interest would be best served by settling all issues pending in this case in accordance with the terms and conditions contained in the Settlement Agreement. The Settlement Agreement is attached hereto as Order Exhibit 1 and is incorporated in and made part of this Order. The terms of the Settlement Agreement are summarized as follows:

- a) The Settling Parties agreed that, without prejudice to the position of any Settling Party in future proceedings, the Settling Parties accept all recommendations and adjustments in the testimony and exhibits of ORS witnesses.
- b) The testimony supported the terms of the Settlement Agreement regarding the appropriate fuel factors for DEC to charge for the period beginning for service rendered in October 2017 and extending through service rendered in September 2018², which are listed in the following table below:

Class of Service	Base Fuel Component (¢/kilowatt-hour (“kWh”))	Environmental Component (¢/kWh)	Avoided Capacity Component (¢/kWh)	DERP Avoided Cost Component (¢/kWh)	Combined Total Projected Fuel Factor (¢/kWh)
Residential	1.7270	0.0331	0.1183	(0.0015)	1.8769
General/Lighting	1.7270	0.0415	0.0959	(0.0005)	1.8639
Industrial	1.7270	0.0267	0.0623	0.0001	1.8161

² The Settling Parties agree that the fuel factors will be adjusted for billing purposes to include gross receipt tax and regulatory fees.

- c) The Settling Parties agreed for purposes of settlement and without prejudice to the position of any Party in any future proceeding that the 2017 component values for the Net Energy Metering (“NEM”) Distributed Energy Resource (“DER”), as listed in the Components of NEM Distributed Energy Resource Value table (“Table”) below, comply with the NEM methodology approved by the Commission in Order No. 2015-194 and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq* (2015).

Components of NEM Distributed Energy Resources Value	Component value (\$ per kWh) Small PV ⁴	Component value (\$ per kWh) Large PV ⁴
Avoided Energy Costs	\$0.03659	\$0.03659
Avoided Capacity Costs	\$0.01399	\$0.01400
Ancillary Services	\$0.00000	\$0.00000
T & D Capacity	\$0.00000	\$0.00000
Avoided Criteria Pollutants ¹	\$0.00003	\$0.00003
Avoided CO2 Emissions Costs	\$0.00000	\$0.00000
Fuel Hedge ²	\$0.00000	\$0.00000
Utility Integration & Interconnection Cost	\$0.00000	\$0.00000
Utility Administrative Cost	\$0.00000	\$0.00000
Environmental Costs	\$0.00000	\$0.00000
Subtotal	\$0.05061	\$0.05061
Line Losses ³	\$0.00238	\$0.00238
Total Value of NEM Distributed Energy Resources	\$0.05300	\$0.05299

Notes

¹ Pursuant to the Settlement Agreement reached in the Company's 2016 fuel case (Docket 2016-3-E), NOx & SOx that were previously included in marginal energy cost have been separately identified. The Company will identify other avoided criteria pollutant cost separately from marginal energy cost in future avoided cost analyses.

² Pursuant to the Settlement Agreement reached in the Docket NO. 2016-3-E – Order No. 2016-687, the Company has calculated the fuel hedge value in a manner consistent with the definition according to the Settlement Agreement in Docket No. 2015-246-E, Attachment A. Because no fuel hedge exists, as calculated, there is no value to assign in the table.

³ Line loss factors are 3.780% on on-peak marginal energy, 3.773% for off-peak marginal energy and 7.136% for marginal capacity per DEC's updated 2017 line loss analysis.

⁴ "Small PV" refers to a load shape reflecting generation installed by a lower usage residential or small commercial/industrial customer. "Large PV" refers to a load shape characteristic of generation by a customer with higher consumption requirements and applies to all other nonresidential rate schedules.

- d) The Company's revisions to the 2017 Renewable Net Metering Rider RNM tariff sheet, attached to the Settlement Agreement as Attachment A, are lawful, just and reasonable, and, if approved by the Commission, shall become effective for service rendered beginning October 2017.
- e) The Settling Parties agreed that the appropriate fixed charges, per account, to recover DERP incremental costs ("DERP Charge") for the period beginning with

the first billing cycle in October 2017 and extending through the last billing cycle of September 2018 are listed below and are consistent with S.C. Code Ann. §§ 58-27-865, 58-39-140 and 58-39-150.³

DERP Charge (\$/account)		
	Annual Charge	Monthly Charge
Residential	0.73	0.06
Commercial	22.17	1.85
Industrial	1,090.49	90.87

- f) The Settling Parties further agreed that, except as noted, any challenges to DEC's historical fuel costs recovery and DERP incremental costs for the period ending May 31, 2017, are not subject to further review; however, the projected fuel costs for periods beginning June 1, 2017, and thereafter shall be open issues in future fuel cost proceedings held under the procedure and criteria established in S.C. Code Ann. § 58-27-865 (2015).
- g) The Settling Parties agreed that with regard to ORS's \$142,149 recommended adjustment in connection with the Company's Solar Rebate Program, the costs attributed to this sample of paid solar rebates are subject to further review and shall be an open issue in future fuel cost proceedings held under the procedure and criteria established in S.C. Code Ann. § 58-27-865 (2015).
- h) With regard to plant outages not complete as of May 31, 2017, and plant outages where final reports (Company, contractor, government reports or otherwise) are not available, the Settling Parties agreed that ORS retains the right to review the

³ The Settling Parties agree that the numbers shown above do not include regulatory fees and gross receipts tax and that the charges that will actually be billed will be adjusted to include those amounts.

reasonableness of plant outage(s) and associated costs in the review period during which the outage is completed or when the report(s) become available.

- i) The Settling Parties agreed that in an effort to keep the Parties and DEC's customers informed of the (over)/under-recovery balances related to fuel costs and DERP incremental costs and of DEC's commercially reasonable efforts to forecast the expected fuel factors to be set at its next annual fuel proceeding, DEC will provide to ORS, and where applicable, its customers the following information:

1. copies of the monthly fuel recovery reports currently filed with the Commission, modified to show the monthly (over)/under-recovery and cumulative balances through the end of the forecast period;
2. copies of the monthly fuel recovery reports currently filed with the Commission, modified to include reports of itemized monthly actual DERP incremental and avoided costs as well as monthly reports reflecting the (over)/under cumulative balances of DERP avoided and incremental costs;
3. forecasts of the expected fuel factors to be set at its next annual fuel proceeding based upon DEC's historical (over)/under-recovery to date and DEC's forecast of prices for uranium, natural gas, coal, oil and other fuel required for generation of electricity. Such forecasts will be provided in the 4th quarter of the calendar year prior to the next annual fuel proceeding and in the 2nd quarter of the calendar year of the Company's next annual fuel proceeding. DEC will use commercially reasonable efforts in making these forecasts. To the extent that the forecast data required hereunder is confidential, any party or customer, other than ORS, that requests

forecasted fuel data will have to sign a non-disclosure agreement agreeing to protect the data from public disclosure and to only disclose it to employees or agents with a need to be aware of this information; and,

4. forecasts of the expected DERP Charge to be set at its next annual fuel proceeding based upon DEC's historical (over)/under-recovery to date and DEC's forecast of DERP incremental and avoided costs. Forecasts will be provided in the same manner as i(3) above.

j) DEC agrees to continue to examine and make adjustments as necessary to its natural gas hedging program in light of the reduced volatility in the domestic natural gas market. DEC also agrees to provide monthly natural gas hedging reports to ORS.

k) In Act 236, the Legislature included a specific requirement that all capacity costs that are recovered through the fuel factor must be allocated and recovered in accordance with the method used by the utility to recover variable environmental costs and included in a separate component of the fuel factor. See S.C. Code Section 58-27-865(A)(1). DEC identified an additional category of fuel costs that can be classified as capacity costs under the fuel factor – firm natural gas transportation and storage costs. Based on its analysis, DEC proposed that these fuel costs be classified, allocated and recovered as capacity costs.

1. The Settling Parties agreed that DEC's firm natural gas transportation and storage costs shall be classified as capacity costs for purposes of recovery under DEC's fuel factor. DEC's proposed methodology for allocating and recovering firm natural gas transportation and storage costs established in this proceeding is consistent with

the statutory requirements of S.C. Code Section 58-27-865(A)(1), as amended, and is just, reasonable, and in the public interest.

2. The Settling Parties further agreed that in order to provide stability in the fuel factor related to the issue of the classification and recovery of capacity costs, no Settling Party shall propose or support any changes to the types of costs classified as capacity and recovered under the capacity component of DEC's fuel factor as established in this proceeding prior to the annual review of DEC's fuel costs in the year 2022. Provided, however, that ORS may make a proposal to reclassify capacity costs if necessary due to unforeseen extraordinary economic or financial conditions that justify such a request in the public interest. If ORS concludes that such a change may be necessary due to such unforeseen extraordinary economic or financial conditions, ORS will provide reasonable advance notice to and consult with the Settling Parties prior to making such proposal and, if ORS decides to proceed with proposing a change after such consultation, this paragraph, K(2), shall be deemed null and void and ORS shall be exempt from paragraph K(1).

Subsequent to the introduction of the Settlement Agreement, DEC and ORS presented witnesses regarding the annual review of base rates for fuel costs of DEC.

B. DEC Testimony

The Company presented the direct testimonies of Scott L. Batson, Joseph A. Miller, Jr., Brett Phipps, Kenneth D. Church, Jason Martin, and Kimberly D. McGee via three (3) panels.⁴

⁴ Prior to the hearing, and without objection from the any party, the Commission granted DEC and ORS permission to utilize panels for the presentations of witnesses. DEC witnesses Batson and Miller were presented in the first panel;

The pre-filed direct testimony of all Company witnesses was accepted into the record without objection or cross-examination by the Settling Parties and the Company witnesses' exhibits were marked as Hearing Exhibits 2 through 7 and were entered into the record of the case.⁵

Company witness Batson discussed the performance of DEC's nuclear fleet during the review period of June 1, 2016 through May 31, 2017 (hereinafter referred to as "review period" or "Actual Period").⁶ Witness Batson testified that DEC operated its nuclear stations in a reasonable and prudent manner during the review period supplying 61% of the power generated. (Tr. p. 29, ll. 9-11). Furthermore, he reported to the Commission that the seven nuclear units operated at an actual system average capacity factor of 95.97%, and a net nuclear capacity factor, excluding reasonable outage time, of 101.51% for the review period). (Tr. p. 29, ll. 11-15). Additionally, for the 17th consecutive year ending 2016, DEC's seven nuclear units have achieved an actual system average capacity factor exceeding 90%. (Tr. p. 29, ll. 15-18).

Company witness Miller testified regarding DEC's fossil/hydro generation portfolio and changes made since the prior year's filing, changes expected in the near term and the performance of DEC's fossil/hydro generation facilities during the review period. According to witness Miller, the Company's fossil/hydro generating units operated efficiently and reliably during the review period. (Tr. p. 13, ll. 21-23). DEC's total system generation was 99.5M MWhs, of which

witnesses Phipps and Church were presented in the second panel; and witnesses Martin and McGee were presented in the third panel. ORS witnesses Smith, Hipp and Morgan also were presented via a panel.

⁵ Composite Hearing Exhibit 2 consists of the two non-confidential Direct Testimony Exhibits 1 and 2 of DEC witness Batson and the Confidential Direct Testimony Exhibit 3 of DEC witness Batson filed under seal; Composite Hearing Exhibit 3 consists of the Direct Testimony Exhibits 1 and 2 of DEC witness Phipps; Composite Hearing Exhibit 4 consists of the Direct Testimony Exhibits 1 and 2 of DEC witness Church; Hearing Exhibit 5 consists of the Direct Testimony Second Revised Exhibit 1 of DEC witness Martin; Composite Hearing Exhibit 6 consists of the Direct Testimony Exhibits 1 through 14 of DEC witness McGee; and Composite Hearing Exhibit 7 consists of Settlement Testimony Exhibits 1 through 14 of DEC witness McGee.

⁶ Pursuant to the Company's request, the Commission granted the Motion of DEC to treat specific material filed in the present proceeding as confidential. Specifically, in Commission Order No. 2017-543, the Commission granted the Company's request that Exhibit 3 of DEC witness Batson's direct testimony be treated as confidential.

approximately 39%, was provided by the fossil/hydro fleet. (Tr. p. 13, ll. 23-25). The breakdown includes a 28% contribution from the coal-fired stations, approximately 10% contribution from CC operations, 1% contribution for the CTs, and 0.4% contribution from the hydro and solar facilities. (Tr. p. 14, ll. 1-5).

Company witness Phipps testified regarding DEC's fossil fuel purchasing practices and costs for the review period versus June 1, 2015 through May 31, 2016, described related changes forthcoming for the period October 1, 2017 through September 30, 2018, and gave an update on the guaranteed merger savings from the Joint Dispatch Agreement and fuel procurement activities pursuant to the merger between Duke Energy Corporation and Progress Energy, Inc.

Company witness Church testified regarding the Company's nuclear fuel purchasing practices and costs for the review period. He also described changes expected in the 2017-2018 billing period. According to witness Church, DEC's portfolio of diversified contract pricing yielded an average unit cost of \$39.79 per pound for uranium concentrates during the review period, representing a decrease of 19% per pound from the prior review period. (Tr. p. 69, ll. 15-19). The average unit cost of DEC's purchases of enrichment services during the review period decreased 5% to \$131.96 per Separative Work Unit. (Tr. p. 69, ll. 19-22). Additionally, witness Church stated that DEC anticipates a decrease in nuclear fuel costs on a cents per kWh basis through the next billing period. (Tr. p. 70, ll. 3-5). Because fuel is typically expensed over two to three operating cycles – roughly three to six years – DEC's nuclear fuel expense in the upcoming billing period will be determined by the cost of fuel assemblies loaded into the reactors during the review period, as well as prior periods. (Tr. p. 70, ll. 5-10). The average fuel expense is expected to decrease from 0.711 cents per kWh incurred in the review period, to approximately 0.653 cents per kWh in the billing period. (Tr. p. 70, ll. 11-14).

Company witness Martin testified regarding DERP costs that are incorporated into the proposed fuel factors by witness McGee. Witness Martin also provided information on the nature of the costs filed as well as any changes made to the DERP portfolio since the 2016 fuel proceeding.

Company witness Martin testified that the Value of NEM Distributed Energy Resource, listed by component in Table 4 on page 8 of his testimony, was consistent with the methodology approved in Commission Order No. 2015-194. (Tr. p. 102, ll. 14-15).

Additionally, Company witness Martin testified that, in accordance with the Settlement Agreement, DEC incurred DERP costs totaling \$3,739,772 in the Review Period; anticipates incurring \$2,028,040 during the Forecast Period; and projects to incur \$8,140,114 in the Billing Period. (Tr. p. 94, ll. 22-25, p. 95, l. 1). These costs represent the avoided and incremental costs associated with the Company's approved DERP offerings, including the Distributed Energy Resource Net Energy Metering Incentive; the Solar Rebate Program; Carrying Costs on Deferred Amounts; NEM Avoided Capacity Costs; NEM Meter Costs; and General and Administrative Expenses, including incremental labor costs as a direct result of DERP, IT and billing enhancements, and other administrative costs associated with delivering these new programs to customers. (Tr. p. 95, ll. 1-11).

Company witness McGee testified regarding the Company's procedures and accounting for actual fuel costs, Public Utility Regulatory Policies Act of 1978 ("PURPA") capacity costs, environmental costs and DERP costs incurred for the review period, the estimated fuel, PURPA capacity, environmental and DERP costs for June 1, 2017 through September 30, 2017, and the Company's proposed fuel, PURPA capacity, environmental and DERP factors by customer class for October 1, 2017 through September 30, 2018.

Witness McGee discussed certain impacts that the Distributed Energy Resource Program Act, Act No. 236 of 2014 (“Act 236”), has on this filing. According to witness McGee, Act 236 revised S.C. Code Ann. § 58-27-865(A), such that the avoided cost payments for purchases from qualifying facilities under PURPA are included in fuel recoverable from South Carolina retail customers. (Tr. p. 120, ll. 14-16). Act 236 also revised S.C. Code § 58-27-865(A)(1) to prescribe the methodology for allocating and recovering any capacity costs that are recovered under the fuel factors. (Tr. p. 120, ll. 16-18).

Witness McGee discussed the Company’s approved DERP, associated costs and the DERP Net Energy Metering (“NEM”) Incentive. Company witness McGee testified regarding the Company’s incurred PURPA and DERP avoided costs. Additionally, witness McGee testified that the Company seeks approval for DERP incremental costs as revised by the Settlement Agreement amounting to a per-account monthly charge of \$0.06, \$01.85 and \$90.87 for South Carolina residential, general and industrial customers, excluding gross receipts tax, are below the statutory per-account cost caps established in Act 236. (Tr. p. 115, ll. 15-20).

According to witness McGee, the cumulative Company’s PURPA capacity cost over-recovery balance was \$513,718 through September 2017; the cumulative over-recovery for environmental costs as of May 2017 totals \$2,985,686 and through September 2017 the cumulative over-recovery balance totals \$526,599; and cumulative under-recovery for base fuel costs as of May 2017 totals \$7,670,353, and through September 2017 the estimated cumulative under-recovery totals \$17,817,203. *See* Hearing Exhibit 7. Additionally, witness McGee testified to a DERP avoided costs over-recovery balance of \$118,548 through September 2017, and an over-recovery balance of \$111,687 through the September 2018 billing period. *Id.*

Witness McGee also testified regarding firm natural gas transportation and storage costs. The Company determined it to be reasonable to consider these costs comparable to other electric demand costs, given their similar attributes. (Tr. p. 126, ll. 20-22). According to witness McGee, both costs are fixed in nature and are associated with the need to produce a certain amount of energy at a point in time. (Tr. p. 126, ll. 22-23, p. 127, l. 1). As a result, witness McGee testified that the Company proposed to reclassify firm natural gas transportation and storage costs as capacity related costs and allocate them as required by S.C. Code Ann. § 58-27-865(A)(1). (Tr. p. 127, ll. 1-3).

According to witness McGee, DEC believes the Settlement Agreement entered into between the Company, SCEUC, and ORS on September 5, 2017, represents a fair, reasonable and full resolution of all issues in this proceeding and should be accepted by the Commission as being in the public interest. (Tr. p. 139, ll. 3-6). Witness McGee testified in her Settlement testimony that she agreed with the fuel factors and the DERP incremental monthly charge as field in the direct testimony of ORS witnesses Morgan and Hipp. (Tr. p. 138, ll. 3-6). The impact of the rates set forth in the proposed settlement for an average residential customer using 1000 kWh per month is an increase of \$1.28, or 1.15%. (Tr. p. 138, ll. 13-14).

C. ORS Testimony

Following the presentation of the Company's witnesses, ORS presented the direct testimonies of Gaby Smith, Dawn M. Hipp, and Willie J. Morgan, via panel. The testimony of all ORS witnesses was accepted into the record without objection or cross-examination by the Settling Parties and the ORS witnesses' exhibits were marked as composite Hearing Exhibits 8 through 10 and entered into the record of the case.

ORS witness Smith presented direct testimony and exhibits, which demonstrated the results of the ORS Audit Staff's examination of DEC's books and records pertaining to the Fuel Adjustment Clause operation for the Actual Period.⁷ (Tr. p. 155, ll. 6-10), *See* Hearing Exhibit 8. The estimated months of June 2017 through September 2017 were also reflected in witness Smith's pre-filed testimony and exhibits. *See* Hearing Exhibit 8. According to witness Smith, subject to ORS's accounting adjustments, ORS found the Company's accounting practices to be in compliance with S.C. Code Ann. § 58-27-865. (Tr. p. 168, ll. 13-16).

ORS witness Hipp presented direct testimony and two exhibits for ORS.⁸ Witness Hipp testified regarding the ORS Utilities Rates and Services Department's findings and examinations of the Company's DERP expenses, including actual, estimated, and forecasted for the period of June 2016 through September 2018 and the proposed changes to Rider RNM. (Tr. p. 174, ll. 8-13). Specifically, witness Hipp testified regarding the Company's avoided and incremental costs and the method by which the Company proposed to recover those costs. *Id.* Witness Hipp testified that the Company's calculation of the NEM incentive was consistent with Docket No. 2014-246-E, and the methodology used by the Company was the methodology approved in Commission Order No. 2015-194. (Tr. p. 178, ll. 4-6). Additionally, witness Hipp addressed the Company's modification to the Rider RNM. (Tr. p. 180, ll. 1-5).

Witness Hipp testified regarding ORS adjustments to DERP Avoided Costs and DERP Incremental Costs. According to witness Hipp, ORS recommends two (2) adjustments to the Company's DERP avoided costs. The adjustments include:

⁷ Composite Hearing Exhibit 8 consists of the Direct Testimony Exhibits of ORS witness Smith (Exhibits 1-10).

⁸ Composite Hearing Exhibit 9 consists of the Direct Testimony Exhibits of ORS witness Hipp (Exhibits 1 and 2).

1) An adjustment of \$668 to reduce the Actual Period excess energy credits paid to customer-generators in May 2017. (Tr. p. 175, ll. 15-16). Witness Hipp testified that the Company did not use the correct avoided cost rate approved by the Commission in Order No. 2016-687 to calculate excess energy credits. (Tr. p. 175, ll. 16-17). ORS applied the correct avoided cost rate and the adjustment is reflected on ORS witness Smith's Audit Exhibit GS-10. (Tr. p. 175, ll. 17-19).

2) An adjustment of \$23,339 to the Forecasted Period to include an expected value for excess energy credits to be paid to customer-generators. (Tr. p. 175, ll. 20-21). According to witness Hipp, the Company did not include a value for expected excess energy credit payments to customer-generators to be paid in May 2018. (Tr. p. 175, ll. 21-23). Witness Hipp testified that ORS believes it is reasonable to use the amount the Company paid for excess energy credits during the Actual Period as a proxy for excess energy credits to be paid to customer-generators in the Forecast Period. (Tr. p. 175, l. 23, p. 176, ll. 1-2). The adjustment is incorporated in ORS witness Morgan's Exhibits WJM-9, WJM-10, WJM-11 and witness Hipp's Exhibit DMH-1. (Tr. p. 176, ll. 2-3).

Witness Hipp also testified regarding ORS's proposed adjustments to the Company's DERP Incremental Costs. According to witness Hipp, ORS recommends two (2) adjustments to the Company's DERP Incremental Costs for the Actual Period. (Tr. p. 176, ll. 12-13). ORS's review of DERP-related costs includes a verification of the Company's calculations related to the Solar Rebate Program. (Tr. p. 176, ll. 13-14). During the review, ORS was unable to verify that a sample of residential and non-residential solar systems were sized accurately. (Tr. p. 176, ll. 14-16). The solar system size determines the amount of the solar rebate paid to the customer-

generator. (Tr.p. 176, ll. 16-17). For that reason, witness Hipp testified that ORS recommended the following adjustments related to the sample:

- 1) An adjustment of \$77,385 to reduce the Company's Solar Rebate Program Amortization;
- 2) An adjustment of \$64,764 to reduce Carrying Costs on Deferred Amounts. (Tr. p. 176, ll. 19-21).

According to witness Hipp, ORS's recommended adjustment is limited to the corresponding sample that it was unable to verify, and ORS will continue to review the Company's calculations related to the Solar Rebate Program. (Tr. p. 176, ll. 22-23, p. 177, l. 1). The adjustments total \$142,149 as reflected in ORS witness Smith's Audit Exhibit GS-9. (Tr. p. 177, ll. 1-2).

Witness Hipp also testified regarding the Company's DERP Incremental cost forecast. ____). According to witness Hipp, ORS recommends revising the DERP incremental cost forecast to more accurately reflect the historic actual costs experienced by the Company due to the variance between the Company's forecast in Docket No. 2016-3-E and the Actual Period DERP incremental costs. (Tr. p. 177, ll. 10-13). Witness Hipp testified that there appears to be no indication that the Company's forecast will break from this trend. (Tr. p. 177, ll. 13-14). The ORS adjustment to the estimated and forecasted DERP incremental costs for the 12-month period beginning June 2017 equates to \$5,496,336 and reduces the total estimated and forecasted amount from \$11,605,440 to \$6,109,104. (Tr. p. 177, ll. 14-16). The ORS adjustment of the Estimated Period is \$1,824,619 and reflected on ORS witness Smith's Audit Exhibit GS-9. (Tr. p. 177, ll. 16-18). The total adjustment of \$5,496,336 is incorporated into Exhibit DMH-1 and ORS witness Morgan's Exhibits WJM-9, WJM-10 and WJM-11. (Tr. p. 177, ll. 18-19). With ORS's adjustments, witness Hipp

recommended that the Company's DERP Charge be as follows: \$0.06/month for the Residential class, \$1.85/month for the Commercial class, and \$90.87/month for the Industrial class. *See* Hearing Exhibit 9.

The Settling Parties agreed to accept all adjustments as set forth in the testimony of ORS witness Hipp. *See* Hearing Exhibit 1, paragraph B.2.

Witness Hipp also stated that ORS supports the Settlement Agreement and recommends the Commission approve it in its entirety. (Tr. p. p. 171, ll. 16-17).

ORS witness Morgan presented direct testimony and exhibits for the ORS Utilities Rates and Services Department.⁹ Witness Morgan testified regarding the Company's fuel expenses and power plant operations. (Tr. p. 186, ll. 11-15). According to witness Morgan, ORS reviewed Company information with reference to the S.C. Code Ann. § 58-27-865 and the Company's approved South Carolina Distributed Energy Resource Program. (Tr. p. 187, ll. 4-7). Witness Morgan testified that during the Actual Period the Company made reasonable efforts to maximize unit availability and minimize fuel costs. (Tr. p. 187, ll. 23, p. 188, l. 1). Additionally, according to witness Morgan, the Company's nuclear stations achieved an average capacity factor of 95.97% for the Actual Period. (Tr. p. 188, ll. 14-17). Finally, witness Morgan testified to ORS's examination of the Company's fossil and nuclear fuel procurement, fuel transportation, environmental reagent purchases, nuclear, fossil and hydro generation performance, plant dispatch, forecasting, and the Company's policies and procedures. (Tr. p. 187, ll. 10-14).

Witness Morgan testified that with the ORS proposed adjustments the Company's fuel factors components for the service rendered in October 2017 extending through service rendered

⁹ Composite Hearing Exhibit 10 consists of the Direct Testimony Exhibits of ORS witness Morgan (Exhibits 1-11).

in September 2018 would be as follows: Environmental Fuel Component of 0.0331 cents per kWh for the Residential class, 0.0415 cents per kWh for the General Service/Lighting class, and 0.0267 cents per kWh for the Industrial class; Avoided Capacity Component at 0.1183 cents per kWh for the Residential class, 0.0959 cents per kWh for the General Service/Lighting, and 0.0623 cents per kWh for the Industrial class; DERP Avoided Cost Component at (0.0015) cents per kWh for the Residential class, (0.0005) cents per kWh for the General Service/Lighting class, and 0.0001 cents per kWh for the Industrial class; Base Fuel Factor at 1.7270 cents per kWh for the Residential, General/Lighting, and Industrial classes. *See* Hearing Exhibit 10.

Witness Morgan also testified regarding the Company's proposal to reclassify firm natural gas transportation and storage costs as a capacity cost. According to witness Morgan, in this case, ORS does not object to the Company's proposal to treat natural gas transportation and storage costs as capacity costs. (Tr. p. 191, ll. 21-22).

No other party filed testimony in this Docket.

In summary, through the testimony, exhibits and Settlement Agreement presented to the Commission in this proceeding, the Settling Parties represent that settling all issues in this case in accordance with the terms and conditions contained in the Settlement Agreement is just, fair, reasonable and in the public interest.

IV. FINDINGS OF FACT AND CONCLUSIONS OF LAW

A. Fuel Expenses

Company witness McGee testified regarding the cumulative PURPA capacity cost over-recovery balance through September 2017; the cumulative over-recovery for environmental costs as of May 2017 and through September 2017; and the cumulative under-recovery for base fuel

costs as of May 2017 and through September 2017. ORS witness Smith agreed with the balances set forth in the Company's testimony regarding the cumulative PURPA capacity under-recovery as of May 2017 and over-recovery through September 2017, cumulative over-recovery balances for environmental costs as of May 2017 and through September 2017, and the cumulative under-recovery balances for base fuel costs as of May 2017 and through September 2017. No party filed testimony contesting the assertions made by Company witness McGee and ORS witnesses Smith and Morgan that the above values are correct and were derived as a result of the Company's compliance with S.C. Code Ann. § 58-27-865. Based on the testimony provided, the Commission finds and concludes that the fuel expense balances as set forth above are derived as a result of the Company's compliance with S.C. Code Ann. § 58-27-865, are just, reasonable, and supported by the substantial evidence in the record.

B. Nuclear Plant Operations

Company witness Batson testified that the Company's nuclear units operated at a net nuclear capacity factor, excluding reasonable outage time, of 101.51% for the review period, which is above the 92.5% set forth in S.C. Code Ann. § 58-27-865 (2015). No party filed testimony contesting the presumption that the Company made every reasonable effort to minimize costs associated with the operation of its nuclear generation facilities. Based on the testimony provided, the Commission finds that the Company has complied with S.C. Code Ann. § 58-27-865, and the presumption that the Company operated its nuclear generation facilities by making every reasonable effort to minimize costs is supported by the substantial evidence in the record.

C. Fuel Factors

ORS witness Morgan testified regarding the fuel factors that include ORS's proposed adjustments. In making its proposed adjustments, ORS witness Morgan testified that Company information was reviewed in reference to S.C. Code Ann. § 58-27-865 and the Company's Commission approved DERP. Company witness McGee testified she agreed with the rates as outlined by witness Morgan. No party filed testimony contesting the factors as outlined by witness Morgan. Based on the testimony provided, the Commission finds that the methodology for determining the factors as outlined by witness Morgan is consistent with S.C. Code Ann. 58-27-865 and the Company's approved DERP and the fuel factors are just, reasonable, and supported by the substantial evidence in the record.

D. Component Values for 2017 Net Energy Metering Distributed Energy Resource Table

No party filed testimony contesting the assertions made by both Company witness Martin and ORS witness Hipp that the Value of NEM DER, as listed in Table 4 of Company witness Martin's testimony are consistent with the methodology approved in Commission Order No. 2015-194. Based on the testimony provided, the Commission finds that the 2017 component values for the NEM DER, as shown in Table 4 in the direct testimony of DEC witness Martin comply with the NEM methodology approved by the Commission in Order No. 2015-194, satisfy the requirements of S.C. Code Ann. § 58-40-10 *et seq.* (2015), and are supported by the substantial evidence in the record.

Resulting from the changes in the NEM Distributed Energy Resource table, the Commission finds that the revisions to the 2017 Renewable Net Metering Rider RNM tariff sheet are lawful, just, reasonable and supported by the substantial evidence in the record.

E. DERP Avoided Cost

ORS recommended an adjustment to reduce the Actual Period excess energy credits paid to customer-generators in May 2017. Once the correct avoided cost rate is applied, it results in a \$668 adjustment. The Company has agreed to make this adjustment. Furthermore, no party filed testimony contesting the testimony from ORS in which this assertion is made. Based on the testimony provided, the Commission finds that an adjustment to the Company's avoided costs incurred during the Actual Period of \$668 is consistent with Commission Order No. 2016-687, is just, reasonable, and is supported by the substantial evidence in the record.

The ORS also recommended an adjustment of \$23,339 to the Company's Forecasted Period to include an expected value for excess energy credits to be paid to customer-generators. The Company has agreed to make this adjustment. No party filed testimony contesting ORS's proposed adjustment. Based on the testimony provided, the Commission finds that an adjustment to the Company's expected avoided costs during the forecasted period of \$23,339 is just, reasonable, and supported by the substantial evidence in the record.

With the ORS adjustments incorporated, Company witness McGee testified regarding the DERP Avoided cost over-recovery balance through September 2017 and the over-recovery balance through September 2018. No party filed testimony contesting the ORS adjusted DERP Avoided cost balances through September 2017 and September 2018. Based on the testimony provided, the Commission finds that the DERP Avoided costs balances as set forth in Company witness McGee's Settlement testimony comply with S.C. Code Ann. § 58-27-865, the Company's Commission approved DERP, and are just, reasonable, and supported by the substantial evidence in the record.

F. DERP Incremental Costs

The ORS recommended two (2) adjustments to the Company's DERP Incremental Costs for the Actual Period. ORS recommended the following adjustments: an adjustment of \$77,385 to reduce the Company's Solar Rebate Program Amortization; and an adjustment of \$64,764 to reduce Carrying Costs on Deferred Amounts.

According to ORS witness Hipp, ORS will continue to review the Company's calculations related to the Solar Rebate Program over the next 12 months and revisit this issue in the next DEC Fuel Hearing. The Company has agreed to make these adjustments and agrees with the DERP Charges as testified to by ORS witness Hipp. No party filed testimony contesting ORS's proposed adjustment. Based on the testimony provided, the Commission finds that the adjustments to the Company's DERP Incremental costs incurred during the Actual Period are reasonable, just, and supported by the substantial evidence in the record with the understanding that this issue will be reviewed over the next 12 months and this adjustment can be revisited in the next DEC Fuel Hearing.

Additionally, ORS recommended revising the DERP incremental cost forecast to more accurately reflect the historic actual costs experienced by the Company due to the variance between the Company's forecast in Docket No. 2016-3-E and the Actual Period DERP incremental costs. The Company has agreed to make this adjustment. No party filed testimony contesting ORS's adjustment in which this assertion is made. Based on the testimony provided, the Commission finds that an adjustment to the Company's forecasted DERP Incremental costs is reasonable, just, and supported by the substantial evidence in the record.

The Commission finds the DERP Charges as laid out by ORS witness Hipp are reasonable, consistent with S.C. Code Ann. §§ 58-27-865, 58-39-140, and 58-39-150 and supported by the substantial evidence in the record.

G. Firm Natural Gas and Transportation Storage Costs

Company witness McGee testified that due to the similar nature of firm natural gas transportation and storage costs and capacity costs, the Company found it reasonable to reclassify firm natural gas transportation and storage costs as capacity costs. ORS witness Morgan testified that, in this case, ORS did not object to the Company's proposal to reclassify natural gas transportation and storage costs as capacity costs. No party filed testimony contesting the testimony of Company witness McGee and ORS witness Morgan. Based on the testimony provided, the Commission finds the reclassification of firm natural gas transportation and storage costs to capacity costs to be supported by the substantial evidence in the record, in this case.

Having heard the testimony of the witnesses and representations of counsel and after careful review of the matters and the Settlement Agreement, the Commission finds that approval of the terms set out in the Settlement Agreement is consistent with the standards for fuel review proceedings conducted pursuant to S.C. Code Ann. § 58-27-865 (2015), is just, reasonable, and supported by the substantial evidence in the record. The Settlement Agreement's terms allow recovery in a precise and prompt manner while assuring public confidence and minimizing abrupt changes in charges to customers. As such, approval of the Settlement Agreement is in the public interest as a reasonable resolution of the issues in this case. The Commission further finds that the Settlement Agreement's terms provide stabilization to the fuel factors, minimize fluctuations for the near future, and do not appear to inhibit economic development in South Carolina. Additionally, the Commission finds and concludes that the Settlement Agreement affords the Parties the opportunity to review costs and operational data in succeeding fuel review proceedings conducted pursuant to S.C. Code Ann. § 58-27-865 (2015).

V. IT IS THEREFORE ORDERED THAT

1. The Settlement Agreement, attached hereto as Order Exhibit 1, and the pre-filed testimonies of ORS witnesses Gaby Smith, Dawn M. Hipp and Willie J. Morgan, and pre-filed testimonies of DEC witnesses Scott L. Batson, Joseph A. Miller, Jr., Brett Phipps, Kenneth D. Church, Jason Martin, and Kimberly D. McGee, along with their respective exhibits entered into evidence as Hearing Exhibits 2-10, are accepted into the record in the above-captioned case without objection.

2. The fuel purchasing practices, plant operations, and fuel inventory management of DEC related to the historical fuel costs and revenues for the period ending May 31, 2017, are prudent.

3. The Settlement Agreement is incorporated into this present Order by reference and attachment and is found to be a reasonable resolution of the issues in this case and to be in the public interest, and is hereby adopted and approved.

4. The methodologies used by the Company to calculate its avoided energy and capacity costs under PURPA for the review and billing period are reasonable and prudent.

5. DEC's proposed methodology for allocating and recovering firm natural gas transportation and storage costs in this proceeding is consistent with the statutory requirements of S.C. Code Ann. § 58-27-865(A)(1), as amended.

6. The Company's revisions to the 2017 Renewable Net Metering Rider RNM, attached hereto as Order Exhibit 2, are lawful, just and reasonable, and shall become effective with service rendered in October 2017.

7. The Company's calculation and method of accounting for avoided and incremental costs for NEM during the review period were reasonable and prudent, were consistent with the

methodology approved in Commission Order 2015-194, and complied with S.C. Code Ann. § 58-40-10 *et seq.* (2015).

8. The 2017 component values for the NEM DER comply with the NEM methodology approved by the Commission in Order No. 2015-194 and satisfy the requirements of S.C. Code Ann. § 58-40-10 *et seq.* (2015).

9. DEC shall set its Residential, General Service/Lighting and Industrial base fuel factor at 1.7270 cents per kWh (not including applicable Environmental Fuel, Avoided Capacity, and DERP Avoided Cost Components) effective for service rendered beginning in October 2017 extending through service rendered in September 2018.¹⁰

10. DEC shall set its Environmental Fuel Component at 0.0331 cents per kWh for the Residential class, 0.0415 cents per kWh for the General Service/Lighting class, and 0.0267 cents per kW for the Industrial class effective for service rendered beginning in October 2017 extending through service rendered in September 2018.

11. DEC shall set its Avoided Capacity Component at 0.1183 cents per kWh for the Residential class, 0.0959 cents per kWh for the General Service/Lighting class, and 0.0623 cents per kW for the Industrial class effective for service rendered beginning in October 2017 extending through service rendered in September 2018.

12. DEC shall set its DERP Avoided Cost Component at (0.0015) cents per kWh for the Residential class, (0.0005) cents per kWh for the General Service/Lighting class, and 0.0001 cents per kW for the Industrial class effective for service rendered beginning in October 2017 extending through service rendered in September 2018.

¹⁰ The base fuel factors, environmental fuel component, avoided capacity component, DERP avoided cost component, and DERP Charge will be adjusted for billing purposes to include gross receipt tax and regulatory fees.

13. DEC shall set its DERP Charge at \$0.06/month for the Residential class, \$1.85/month for the Commercial class, and \$90.87/month for the Industrial class.

14. The Settling Parties shall abide by the terms of this Settlement Agreement.

15. DEC shall file with the Commission the South Carolina Retail Adjustment for Fuel, Variable Environmental, Avoided Capacity Costs and Distributed Energy Resource Program Costs, the Company's revisions to the 2017 Renewable Net Meter Rider RNM tariff sheet found in Tariff RNM, and all other retail Tariffs within ten (10) days of receipt of this Order, said filings incorporating our findings herein. The revised tariffs should be electronically filed in a text searchable PDF format using the Commission's DMS System (<http://dms.psc.sc.gov>). An additional copy should be sent via email to etariff@psc.sc.gov to be included in the Commission's ETariff system (<http://etariff.psc.sc.gov>).

16. DEC shall comply with the notice requirements set forth in S.C. Code Ann. § 58-27-865.

17. DEC shall continue to file the monthly reports as previously required.

18. DEC shall continue to examine and make adjustments as necessary to its natural gas hedging program in light of the reduced volatility in the domestic natural gas market. DEC shall also provide monthly natural gas hedging reports to ORS.

19. DEC shall, by rate class, account monthly to the Commission and ORS for the differences between the recovery of fuel costs through base rates and the actual fuel costs experienced by booking the difference to unbilled revenues with a corresponding deferred debit or credit.

20. DEC shall submit monthly reports to the Commission and ORS of fuel costs and scheduled and unscheduled outages of generating units with a capacity of 100 megawatts ("MW") or greater.

21. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Swain E. Whitfield, Chairman

ATTEST:

Comer H. "Randy" Randall, Vice-Chairman

(SEAL)